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EXAMINER

LASTRA, DANIEL

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
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8 *Ex parte* JAMES MORRISON
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11 Appeal No. 2007-2077
12 Application No. 09/217,542
13 Technology Center 3600
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16 Decided: February 6, 2008
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19 Before WILLIAM F. PATE, III, TERRY J. OWENS, and JENNIFER D.
20 BAHR, *Administrative Patent Judges*.

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22 OWENS, *Administrative Patent Judge*.
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25 DECISION ON APPEAL

26 The Appellant appeals from a rejection of claims 27-38, which are all
27 of the pending claims.

28 THE INVENTION

29 The Appellant claims a system and method for operating a self-service
30 checkout terminal. Claim 27 is illustrative:

27. A method of operating a self-service checkout terminal of a retail store, comprising the steps of:

- recording a number of merchandise items for purchase by a user by said self-service checkout terminal;
- receiving movement signals from a plurality of adjoining detection zones of a floor mat in a checkout floor area adjacent to said self-service checkout terminal in response to said detection zones reacting to a weight of said user as said user walks on said detection zones by said self-service checkout terminal;
- tracking directional movements of said user from said movement signals by said self-service checkout terminal as said user walks about said checkout floor area in any direction while using said self-service checkout terminal;
- receiving a last movement signal as said user leaves said checkout floor area indicative of said user ceasing operation of said self-checkout terminal;
- determining if a payment-tendered control signal was received by said self-service checkout terminal indicative of said user having tendered payment for said merchandise items prior to receipt of said last movement signal; and
- if said payment-tendered control signal was not received by said self-service checkout terminal, determining a last direction of movement of said user prior to said user leaving said checkout floor area by said self-service checkout terminal, and operating a summoning device so as to summon retail personnel by said self-service checkout terminal if said last direction of movement was towards an exit of said store.

THE REFERENCES

Cotton	US 4,630,110	Dec. 16, 1986
Addy	US 6,056,087	May 2, 2000 (filed Sep. 29, 1997)
Terranova	US 6,098,879	Aug. 8, 2000 (filed Feb. 17, 1998)

THE REJECTION

Claims 27-38 stand rejected under 35 U.S.C. § 103 as being unpatentable over Addy in view of Terranova and Cotton.

OPINION

We reverse the aforementioned rejection. We need to address only the independent claims, i.e., claims 27 and 33. Method claim 27 requires:

receiving movement signals from a plurality of adjoining detection zones of a floor mat in a checkout floor area adjacent to said self-service checkout terminal in response to said detection zones reacting to a weight of said user as said user walks on said detection zones by said self-service checkout terminal;

tracking directional movements of said user from said movement signals by said self-service checkout terminal as said user walks about said checkout floor area in any direction while using said self-service checkout terminal;

System claim 33 requires:

a floor mat including a plurality of adjoining detection zones for producing movement signals in a checkout floor area in response to said detection zones reacting to a weight of said user as said user walks on said detection zones;

* * *

a self-service checkout terminal adjacent to said checkout floor area including a computer for

* * *

tracking directional movements of said user from said movement signals as said user walks about said checkout floor area in any direction while using said self-service terminal;

Addy discloses “a method and apparatus for providing security to a self-service checkout terminal” (Addy, col. 1, ll. 16-18). Addy uses a light curtain device (24) to detect items’ insertion into and removal from grocery bags (17) and positioning on and removal from a post-scan set-aside surface (19b) (Addy, col. 5, ll. 51-57). Addy keeps a suspicion log, and if the suspicion log exceeds a predetermined threshold value a processing unit (12) causes an output

1 signal to be sent to a network (28) that summons the retailer's
2 personnel (Addy, col. 17, l. 63 – col. 18, l. 1).

3 Terranova discloses “fuel dispensers and systems capable of
4 communicating with various types of transponders and detecting their
5 movement within and throughout a fueling environment” (Terranova, col. 1,
6 ll. 10-13). A transponder is carried by the customer or is mounted to the
7 customer's vehicle (Terranova, col. 11, ll. 38-39). The customer can use the
8 transponder to pay for food along with fuel at the fuel dispenser, and if the
9 customer drives off without paying the dispenser transmits a drive-off signal
10 to the transponder and alerts the system operator (Terranova, col. 11, ll. 39-
11 43; col. 34, ll. 17-24).

12 Cotton discloses a retail store surveillance system comprising a floor
13 mat having switch arrays embedded therein that detect when people enter or
14 exit the store (Cotton, col. 4, ll. 47-68; col. 10, ll. 18-29, 45-50).

15 The Examiner argues, in reliance upon Cotton's disclosure regarding
16 figure 4, areas 46 and 47 and arrow 49, that Cotton's floor mat can sense
17 customer movement in any direction (Ans. 9). That argument is incorrect.
18 Arrow 49 points in the direction either into or out of the store (Cotton, col.
19 10, ll. 30-35). As indicated by figure 4, movement is detected only in one of
20 those two directions. Thus, the Examiner has not established that Cotton
21 would have rendered prima facie obvious, to one of ordinary skill in the art,
22 tracking directional movements of the user in any direction as required by
23 the Appellant's claims.

24 The Examiner points out that Cotton discloses that movements across
25 the floor mat which, for example, can indicate a large number of people in
26 the store, can trigger video recording of merchandise commonly subject to

1 shoplifting (Cotton, col. 28, ll. 46-56) (Ans. 10). The Examiner argues that
2 because Cotton's floor mat can trigger an alarm event (Cotton, col. 28, ll.
3 46-56) and Addy's video system detects fraudulent behavior and summons
4 security personnel (Addy, col. 11, l. 55 – col. 12, l. 1; col. 17, l. 63 – col. 18,
5 l. 4), "it would have been obvious to a person of ordinary skill in the art that
6 Addy's self service terminal would place the [sic] Cotton's floor mat
7 adjacent to said terminal in order to restrict the area in which to alert a
8 security personnel" (Ans. 10). Addy already summons the retailer's
9 personnel to the self-service checkout terminal being used by a particular
10 customer (Addy, col. 17, ll. 58-63). Hence, the Examiner's reason why one
11 of ordinary skill in the art would have used Cotton's floor mat with Addy's
12 self-service checkout terminal in the manner argued by the Examiner is not
13 persuasive.

14 The Examiner argues that "Terranova teaches that it is old and well
15 known in the business art the idea of triggering an alarm and summon[ing]
16 personnel when a person is walking out from a terminal without tendering
17 payment (see Terranova col 34, lines 20-30)" (Ans. 11). What that portion
18 discloses is that if a drive-off condition is detected the customer and security
19 personnel are alerted. The Examiner then argues that in view of Terranova's
20 disclosure of triggering an alarm and summoning personnel, one of ordinary
21 skill in the art would have added Cotton's floor mat to Addy's system to
22 detect whether a person is walking away from the store without paying at the
23 checkout terminal and to trigger an alarm, turn on video surveillance
24 cameras and summon personnel (Ans. 11). Even assuming it would have
25 been obvious to one of ordinary skill in the art to add Cotton's floor mat to
26 Addy's system, the Examiner has not established that Cotton would have

1 rendered prima facie obvious, to one of ordinary skill in the art, tracking
2 directional movements of the user in any direction as required by the
3 Appellant's claims, as discussed above. The record indicates that the
4 Examiner's reasoning for combining the references in such a manner to
5 arrive at the claimed invention is based upon impermissible hindsight in
6 view of the Appellant's disclosure. *See W.L. Gore & Associates v. Garlock,*
7 *Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851
8 (1984); *In re Rothermel*, 276 F.2d 393, 396 (CCPA 1960).

9 For the above reasons we reverse the Examiner's rejection.

10 DECISION

11 The rejection of claims 27-38 under 35 U.S.C. § 103 over Addy in
12 view of Terranova and Cotton is reversed.

13 REVERSED

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